

Understanding HIPAA Compliance Practice in Healthcare Organizations in a Cultural Context

Emergent Research Forum (ERF) Paper

Osborne Obeng
Nova Southeastern University
0092@mynsu.nova.edu

Souren Paul
Nova Southeastern University
spaul@nova.edu

Abstract

The adoption of information technology by healthcare organizations has increased the risk of patient data being improperly handled by healthcare organizations. As a result of this growing concern, the United States government and state authorities have implemented various regulations to mitigate the privacy concerns. However, surveys show that healthcare organizations fail to achieve information privacy compliance. This study proposed to examine the creation of information privacy culture from the different occupational communities in healthcare organizations to help achieve information privacy compliance. This research would apply the dynamic social impact theory (DSIT) and the theory explains how coherent structures of cultural elements are developed from the interactions of people located in the same spatial location. This paper argues that interaction is important because healthcare professionals have different attitudes about each other's field that requires cultural synergy to enable healthcare organizations to achieve HIPAA compliance practice.

Keywords: *HIPAA Compliance, Information Privacy, Occupational community, Culture creation.*

Introduction

Healthcare organizations are relying on information technology to take advantage of the many benefits technology provides. In addition, health IT enable organizations to store, share and analyze patients' health data in real time (Karsh, Weingner, Abbott, & Wears, 2010). The adoption of information technology by healthcare organizations has increased the risk of patient data being improperly handled by healthcare organizations (Appari & Johnson, 2010). As a result of this growing concern, the United States government and state authorities have implemented various regulations to mitigate the privacy concerns. The Health Insurance Portability and Accountability Act (HIPAA) was passed to regulate healthcare organizations to protect patient information.

Survey reports, however, show that healthcare organizations are failing to achieve privacy compliance (Bishop et al., 2005). In addition, extant literature on the phenomenon has explained the causes of failure to the privacy compliance by healthcare organization in general (Johnston & Warkentin, 2008). It is fair to argue that regulatory pressure alone does not influence organizations to commit to protecting patients' health information. Contradictory laws and policies at various government levels have fostered confusion about achieving information privacy compliance (Fernando & Dawson, 2009). Regulatory mandates are often criticized for lack of clarity. Current low level of full compliance among healthcare organizations call for attention from the research community to examine compliance related issues on other fronts (Appari & Johnson, 2010). However, few studies, if any have examined the creation of information privacy compliance culture from the different occupational communities within healthcare organizations, which could provide a collective information privacy practice in the healthcare organizations and toward information privacy compliance. In addition, the notion is that such community-level culture or information privacy cultural cohesiveness will help in reducing existing tensions among and between the different groups within the healthcare community and will help to address organizations' healthcare privacy compliance failures. Therefore, this study will seek to fill the gap in literature by examining the creation of coherent information privacy culture in healthcare organizations to achieve information privacy compliance. Harkins (2012) claimed that there is a need to develop an organizational culture that supports interaction. This paper

argues that the creation of a coherent information privacy culture through social interaction is indeed important because healthcare and information privacy professionals have different attitudes about each other's field that requires cultural synergy.

The focus of this study is to examine the creation of information privacy culture among the different occupational communities in healthcare organizations that could help an organization to achieve collective HIPAA compliance practice. In healthcare organizations, many different occupational communities (e.g., physicians, nurses, technicians, etc.) work and interact with one another (Vaast, 2007). Although, these communities differ in training, activities, and methods, they are active participants relative to patient care. In other words, their goal in providing the best patient care is centric; their approach differs based on their training. Consequently, the resultant tensions between or among the groups make it difficult for an organization to achieve information privacy compliance (Adam and Blandford, 2005).

Theoretical Development and the Research Model

Social psychology research has found that people in close proximity are able to influence each other through inter-personal interactions (Richerson & Boyd, 2005) and the healthcare environment has different occupational groups interacting with each other for the purpose of patient care. The dynamic social impact theory (Latane, 1996) would be applied as a theoretical foundation to examine the creation of a coherent information privacy culture within healthcare organizations and reduction of job tensions between the groups.

The dynamic social impact theory (DSIT) explains how coherent structures of cultural elements are developed from the interactions of people located in the same spatial location based on four basic patterns: clustering, consolidation, correlation, and continuing diversity (Latane, 1996). According to the DSIT, people in the same vicinity will develop similar culture elements in terms of socially transmitted beliefs, values, and practices that have a major influence in communication (Latane, 1996). This study refers to the influence as transmission of issue of importance from one person or group to another. According to the DSIT, the interactions and transmission of issue importance between the groups leads to the formation of the four patterns of culture creation (Latane, 1996). This study argues that using information privacy concern as an issue of importance, healthcare organization can create a coherent culture through the four culture creation process: clustering, consolidation, correlation, and continuing diversity. The constructs in this study are derived from the DSIT and constructs from information privacy literature.

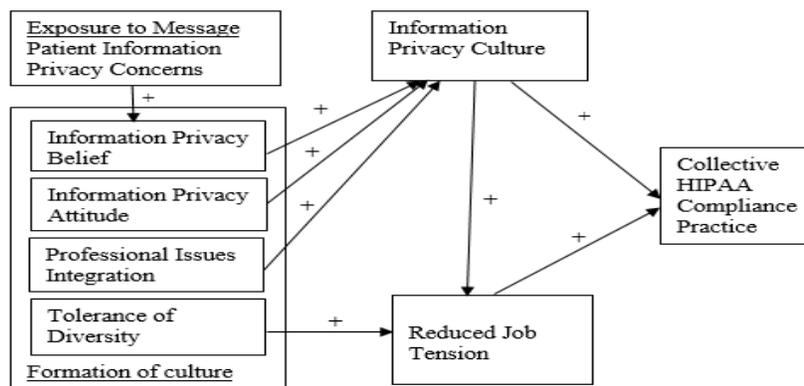


Figure 1: Proposed Research Model

Exposure to message. Information privacy is defined as the “ability of the individual to personally control information about one’s self” (Stone et al. 1983, p. 461). This definition and many others indicate that information privacy issue is important to individuals, occupational communities, organizations, and nations. Perception of information privacy concerns mean different things to different people depending on the person’s background (Hofstede, 1980). For example, the clinical communities (Physicians, Nurses, Technicians, etc.) approach to patients’ privacy concerns may differ from the approach of other communities such as Information Technology personnel and management (Vaast, 2007). This study posits that the occupational communities in healthcare organizations can be persuaded to understand the

importance of patients' information privacy concerns. Angst and Agarwal (2009) assessed the impact of privacy concerns on attitude change and drew on the elaboration likelihood model to persuade individuals to support EHR systems adoption. This study argues that exposing information privacy concerns as an issue of importance could persuade the occupational communities to develop information privacy beliefs. Therefore, this paper states that:

Proposition 1. *Exposure to the message of patient's information privacy concerns as an issue of importance to the different occupational communities will have a positive impact in developing information privacy beliefs.*

Information privacy belief. Culture formation process begins when people or groups move to areas within a social space based on their comfort level, income, age, ethnicity, politics, and other issue of importance to form a belief (Tribe, Schelling, & Voss, 1976). In Nowak, Szamrej and Latané (1990) study, people opinion changes throughout the election year and the electorate preferences begin to reflect the common reactions to the events. It is fair to argue that the different occupational communities in healthcare organizations will develop beliefs around the information privacy issue if intentionally and well transmitted between the groups. Employees of healthcare organizations usually work in close proximity to care for patients in the healthcare environment and therefore, can greatly influence one another. As the different groups develop information privacy beliefs around the issue of importance, they will develop positive attitude toward patient information privacy concerns and lead to a coherent information privacy culture. Hence, this study proposes that:

Proposition 2. *Information privacy beliefs will have a positive impact on creating a coherent information privacy culture.*

Information Privacy Attitudes Formation. Occupational communities' beliefs in information privacy will lead to positive attitude formation in patient information privacy concerns. The positive information privacy attitude will become stronger as the groups continue to be exposed to patient information privacy concerns as an issue of importance overtime (Latané & Bourgeois, 1996). This will occur as the groups become more influenced by the viewpoints of the majority and lead to the increase in information privacy views. On the other hand, the number of groups holding minority views or resisting to change their views will diminish over time (Binder et al., 2001; Jackson et al., 2002). It can be argued that using communication as a means to introduce information privacy as issue of importance will change the mindset of the different communities in healthcare organizations to focus on information privacy concerns over time. This study argues that as organizations intentionally transmits the information privacy concerns as an issue of importance; information privacy compliance factors will become the cultural elements in healthcare organizations. According to the DSIT principles, the opposing views from the communities within the organization will diminish over time as a result of the consolidation process. Thus, this study expects that:

Proposition 3. *Information privacy attitude will have a positive impact on creating coherent information privacy culture.*

Professional issues integration. Professional issues integration refers to the extent of reciprocal support the occupational communities receives for their professional concerns other than information privacy issues (Feldman, 1968). The DSIT states that over time attributes that were formally unrelated among people will become related because as people converge around the issue of important (Harton & Bourgeois, 2004). This study refers to the correlation and the converging of issues as integration of professional issues. As the occupational communities interact and develop information privacy beliefs, they will also develop support for each other's professional concerns beside the initial information privacy concerns. There are many other issues that physicians, nurses, and the other groups in organizations could agree upon as a result of them developing information privacy beliefs and forming a positive attitude; and could have causal relationship with creating a coherent culture. Therefore, this study states that,

Proposition 4. *Professional issues integration as part of the culture formation process will have a positive impact on creating a coherent information privacy culture.*

Tolerance of diversity. Tolerance of diversity is defined as the occupational communities' acceptance of their professional differences (Onyx and Bullen, 2000). DSIT refers to the tolerance of diversity as continuing diversity in the culture formation process where the minority view survives despite the development of information privacy beliefs and attitude. People in the minority tend to be surrounded by

the majority and receives support from people who hold similar views and are protected by the majority (Kameda & Sugimori, 1995). This study asserts that the tolerance of diversity will help reduce the tensions between the groups as the groups will be less concerned about the shared information privacy beliefs and the positive attitude overtaking their professional differences or diversity (Latane, 1996). Therefore, this study expects that:

Proposition 5. *Tolerance of diversity as the final phase of the culture formation process will have a positive effect on reducing tensions between the different groups.*

Information Privacy Culture and Collective HIPAA Compliance Practices. Sackmann (1992) defined culture as ideologies, coherent sets of beliefs, basic assumptions, shared sets of core values, important understandings, and the collective will. Steward and Gosain (2006) employed earlier work by Trice and Beyer (1993) to identify Open Source Software (OSS) development ideology that helps the team to function. It is fair to argue that these cultural elements (beliefs, values, and norms) can be adopted to create a coherent information privacy culture. In the context of information privacy culture, *value* is a person decision to keep another person from acquiring given information about himself or herself, *beliefs* is a perception that the desired level of information control was not achieved during a particular interchange with the other person, and *norm* is experiencing negative effect as a consequence (Stone et al., 1983). As a result, using information privacy concerns as an issue of importance will bring together the different occupational communities in healthcare organizations to create a coherent information privacy culture and reduce the tensions and enable collective information practice. Collective information practice as defined by Dourish and Anderson (2006) refers to the collective understanding of the ways in which information should be shared, withheld, and managed. This paper posit that information privacy cultural values learned would lead to reducing tensions between the occupational communities. Therefore, it is proposed that:

Proposition 6. *Information privacy culture created among the different occupational communities within healthcare organization will have a positive impact in reducing job tensions.*

Proposition 7. *Information privacy cultural values learned within the different occupational communities in healthcare organization will have a positive impact in collective HIPAA compliance practice.*

Reduced Job Tension and Collective Information Practices. Job tension results from an individual's feelings associated with perceived negative consequences of role perceptions (Lusch & Serpkenci, 1990). The differences between clinicians' perceptions of the importance of information privacy in the organization creates adversarial relationships between clinicians and other occupational communities such as compliance professionals, information technology professionals, and the management team (Adams & Sasse, 2001). Establishing relationship between the occupational communities through coherent culture will reduce the tensions. Therefore, this study argues that to address the tensions within the different occupational communities in healthcare organizations, collective information practice is needed. Therefore, this study posits that:

Proposition 8. *Reducing job tension within different communities in healthcare organizations will have a positive impact on collective HIPAA compliance practices.*

Conclusion

This study will contribute to information privacy researchers understanding of how the dynamic social impact theory could be used as a framework to create information privacy culture within healthcare organizations. Management could leverage the cultural values identified in the process to influence employees to achieve information privacy compliance. Information privacy awareness programs would be introduced to the members of various communities based on the cultural values identified. We will empirically validate our model by collecting data from two different healthcare organizations with one having exposed information privacy message to its' occupational communities and the other without exposing information privacy message to its employees to test the creation of coherent information privacy culture and collective information privacy practice. We expect the data analysis and the results to demonstrate how a coherent HIPAA compliance culture could be created to achieve collective information privacy compliance practices.

REFERENCES

- Adams, A., & Blandford, A. 2005. Bridging the gap between organizational and user perspectives of security in the clinical domain. *International Journal of Human-Computer Studies*, (63:1), pp. 175-202.
- Adams, Anne & Sasse, Angela. 2001. Privacy in Multimedia Communications: Protecting Users, Not Just Data. pp. 49–6
- Angst, C. M., & Agarwal, R. 2009. Adoption of electronic health records in the presence of privacy concerns: the elaboration likelihood model and individual persuasion. *MIS quarterly*, (33:2), pp. 339-370.
- Appari, A., Johnson, M.E., & Anthony, D. 2009. HIPAA compliance: an institutional theory perspective. Proceeding of Americas Conference of Information Systems (AMCIS). San Francisco, CA.
- Bishop, L., Holmes, B. J., & Kelley, C. M. 2005. National consumer health privacy Survey 2005: executive summary.
- David L. Weakliem, & Robert, B. 1999. Region and Political Opinion in the Contemporary United States. *Social Forces*, (77:3), pp. 863.
- Dourish, P., & Anderson, K. 2006. Collective information practice: Exploring privacy and security as social and cultural phenomena. *Human-computer Interaction* (21:3), pp. 319-342.
- Feldman, M. S., & March, J. G. 1981. Information in organizations as signal and symbol. *Administrative science quarterly*, pp. 171-186.
- Fernando, J. I., & Dawson, L. L. 2009. The health information system security threat lifecycle: An informatics theory. *International Journal of Medical Informatics* (78:12), pp. 815-826.
- Harkins, M. 2012. *Managing Risk and Information Security: Protect to Enable*. Apress.
- Hofstede, G. 1980. Motivation, leadership, and organization: do American theories apply abroad? *Organizational dynamics* (9:1), pp. 42-63.
- Johnston, A. C., & Warkentin, M. 2008. Information privacy compliance in the healthcare industry. *Information Management & Computer Security* (16:1), pp. 5-19.
- Karsh, B., Weinger, M. B., Abbott, P. A., & Wears, R. L. 2010. Health information technology: Fallacies and sober realities. *Journal of the American Medical Informatics Association* (17:6), pp. 617-623.
- Kameda, T., & Sugimori, S. 1995. Procedural influence in two-step group decision making: Power of local majorities in consensus formation. *Journal of Personality and Social Psychology* (69:5), pp. 865-876.
- Latané, B., & Bourgeois, M. J. 1996. Experimental evidence for dynamic social impact: The emergence of subcultures in electronic groups. *Journal of Communication* (46:4), pp. 35-47.
- Vaast, E. 2007. Danger is in the eye of the beholders: Social representations of Information Systems security in healthcare. *The Journal of Strategic Information Systems* (16:2), pp. 130-152.
- Lusch, R. F., & Serpkenci, R. R., 1990. Personal Differences, Job Tension, Job Outcomes, and Store Performance: A Study of Retail Store Managers. *Journal of Marketing* (54:1), pp. 85–101.
- Nowak, A., Szamrej, J., & Latané, B. 1990. From private attitude to public opinion: A dynamic theory of social impact. *Psychological Review* (97:3), pp. 362.
- Onyx, J., & Bullen, P. 2000. Measuring social capital in five communities. *The journal of applied behavioral science* (36:1), pp. 23-42.
- Richerson, P. J. & Boyd, R. 2005. Not by genes alone: How culture transformed human evolution. University of Chicago Press.
- Sackmann, S. A. 1992. Culture and subcultures: An analysis of organizational knowledge. *Administrative Science Quarterly*, pp. 140-161.
- Schein, E. H. 1990. *Organizational culture* (45:2), pp. 109. American Psychological Association.
- Stewart, K. J., & Gosain, S. 2006. The impact of ideology on effectiveness in open source software development teams. *MIS Quarterly*, pp. 291-314.
- Stone, E. F., Gueutal, H. G., Gardner, D. G., & McClure, S. 1983. A field experiment comparing information-privacy values, beliefs, and attitudes across several types of organizations. *Journal of Applied Psychology* (68:3), pp. 459-468.
- Tribe, L.H., Schelling, C.S., & Voss, J. 1976. *When values conflict. Essays on environmental analysis, discourse, and decision*. United States.
- Trice, H. M., & Beyer, J. M. 1993. The cultures of work organizations. Englewood Cliffs, NJ: Prentice-Hall, Inc.